

AN APPARATUS FOR ENCODING AND DECODING

ABSTRACT

Provided is a communication device which executes proper communications by correcting communication errors caused by noise generated on a transmission line or the like. An encoding device for adding error correction code to an input data sequence is provided with a first code encoding unit for adding binary error correction code to each of a plurality of first data blocks into which the input data sequence is divided, and a second code encoding unit for adding a symbol error correction code for correcting errors by a symbol unit of a predetermined length to each of a plurality of second data blocks into which the input data sequence is divided in a form different from that of the plurality of first data blocks, and characterized in that the number of bit errors to be corrected by the binary error correction code per total number of bits of the first data block to which the binary error correction codes is added is larger than the number of bit errors to be corrected by the symbol error correction code per total number of bits of the second data block to which the symbol error code is added.